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United Nations Industrial Development Organization

ESCAP Regional Energy Development Programme (REDP)
Regional Network for Small Hydropower (RN-SHP)

Technical Advisory Group (TAG)
First Meeting

Hangzhou, China, 11 - 13 December 1984

Review and Evaluation of Activities during 1982/83/84 *

(Agenda item 4)

prepared by

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Purpose and coverage period

The purpose of this report is to provide background information on the setting-up of RN-SHP and to provide an overview of RN-SHP activities completed up to Nov. 1984, including those under REDP Phase I (but not Phase II)

Background and institutional aspects

The First Seminar Workshop (Sept. 1979, Nepal) and the Second Workshop (Oct/Nov 1980, Hangzhou-Manila) both highlighted the need for a Regional Centre for Small Hydro Power, to promote regional co-operation between and among Asia-Pacific countries in particular. In response to recommendations at these two workshops, the People's Republic of China decided to establish the Hangzhou Regional Centre (Asia-Pacific) for SHP, hereafter called HRC, with the support of UNDP, UNIDO and ESCAP, to serve both as the national institution for SHP activities as well as a regional centre. The project document for HRC was signed in Nov. 1981. Further details of its activities can be found in the HRC Brief Progress Report.

To discuss the work of the Regional Centre further, UNIDO, together with HRC and in cooperation with UNDP and ESCAP, organized a Senior Expert Group Meeting in July 1982. This meeting recommended the creation of an ESCAP SHP Network whose work would include the areas of R+D, Training, Information and Consultancy services. It also recommended that the RN-SHP Secretariat be located at HRC for an interim period. Furthermore, funds earmarked in the REDP for SHP activities were allocated to RN-SHP under REDP Phase I (1982-1983), and the activities of HRC and RN-SHP were to be assessed by a review meeting consisting of senior experts from the participating organizations, hence the necessity for the present TAG meeting.

On the basis of the findings and recommendations of the Senior Expert Group Meeting, the Third Workshop on SHP, Kuala Lumpur March 1983, drew up a tentative Work Programme. The recommendations of the Senior Expert Group Meeting were also endorsed by the first session of the REDP Steering Committee which met in Bangkok, May 1983. The Committee endorsed the proposal that HRC should act as the interim Secretariat of RN-SHP, with the Director of HRC serving as the Interim Co-ordinator. The Committee felt that RN-SHP was not to be viewed as an institution, but as representing a co-operative arrangement for carrying out specific activities. The REDP Steering Committee would provide overall guidance on network activities, assisted by the Technical Advisory Group. This group would be responsible for the formulation of project activities and work programme.

The Second session of the REDP Steering Committee Bangkok, Aug.1984, also recommended support under REDP Phase II (1984-1986) for specific follow-up activities of RN-SHP. These are discussed in the document related to agenda item 5(a).

Establishment of HRC

Following the signing of the project document in Nov. 1981, the Chinese Government provided 2,000,000 RMB (1 Yuan RMB is about 0.4 US$) for the construction of Phase I buildings, together with salaries and overheads for staff as required. The number of staff is at present 60, of whom 30 are professional technical people. Complementing this, UNDP has provided US$ 400,000 for various items of equipment, as detailed in the Progress Report. Thus, a solid foundation has been laid for HRC to function as the RN-SHP Secretariat.

The Chinese Government lays particular importance on SHP development both in China itself and also in the Asia-Pacific region. Thus, it has allocated a further 4,000,000 RMB for Phase II buildings of floor area 10,000 m^2, to be completed the second half of 1986, including an up-to-date Centre of international standards. These new buildings will enable existing equipment to be utilized to the full, and improve our existing capabilities in the field of research, training and information services for the benefit of members of the RN-SHP network.

Review of RN-SHP Activities 1982-1984

A summary of HRC's work is contained in the brief Progress Report. Major RN-SHP Activities in the period 1982-Nov.1984 are given in Table 1, and participation in each completed activity is summarised in Table 2.

Considerable delays in securing funds were experienced in early 1984, leading to delays in carrying out some activities. It can be seen that items 8-12 are still under way, and are included in RN-SHP activities for 1985-1986, see separate report. Otherwise, the remaining items 1-7 have been completed satisfactorily with wide participation from throughout the region. In general, the activities have been in line with the tentative Work Programme discussed at the Third Workshop on SHP (March 1983).

Apart from the organization of specific activities, the Secretariat has devoted some time to the establishment of the Network i.e. seeking nominations from ESCAP member governments for the appointment of national SHP focal points. We are pleased to note that so far, 10 SHP Focal Points have been nominated, representing most Asia-Pacific countries active in the field of SHP (see Table 3 for a full list).

Table 1 RN-SHP Activities 1982-Nov. 1984

No.	Date	Activity	Responsible agency/ organization + cash funding*	Status
1	July 82	Senior Expert Group Meeting on the Creation of a Regional Network System and the Assessment of Priority Needs on Research, Development and Training in the field of Small/Mini Hydro Power Generation Hangzhou, China	UNDP, UNIDO, ESCAP } $30,000 HRC 30,000 RMB (1 Yuan RMB about 0.4$)	Completed
2	May-Jun 83	1st Training Workshop on SHP for the Asia-Pacific Region, Hangzhou, China	UNDP, UNIDO, ESCAP/REDP } $46,000 RCTT-Sponsored one participant HRC 30,000 RMB	Completed
3	Sept 84	2nd Training Workshop on SHP for the Asia-Pacific Region, Hangzhou, China	UNDP, UNIDO } $36,000 HRC 10,000 RMB	Completed
4	Oct/Nov 1984	RN-SHP Secretariat Consultation Mission	UNIDO ESCAP/REDP $15,000 selected focal points	Completed
5	May 84	Publication of 1st Newsletter	UNIDO HRC	Completed
6	Nov 84	Publication of 2nd Newsletter	UNDP/UNIDO $ 1,000 HRC $ 400	Completed

No.	Date	Activity	Responsible agency/ organization + cash funding*	Status
7	March 1984	TOKTEN Consultant - Prof.A.S. Tseng for advice on design and equipment for Panxi Telemetry project	UNDP	Completed
8	on-going	R + D project: Telemetry and Automation of Panxi Cascade Stations	UNDP / UNIDO } $78,000 HRC+relevant domestic organizations 500,000 RMB	Major equipment ordered; Station renovation started; software design in progress; installation on site planned for 2nd quarter 1985
9	on-going	R+D project:local assembly and application of low-cost Electronic Load Controllers at micro hydro power stations in the Asia-Pacific region	UNDP/UNIDO ESCAP/REDP $12,500 (Phase II, not used so far) ITDG selected focal points HRC ---- 20,000 RMB	ITDG support in form of kits and consultancy; Project proposal sent out to selected focal points mid-October; Project meeting planned for late 1984/early 1985; HRC has already fixed site location in China and manufacturer for local assembly

No.	Date	Activity	Responsible agency/ organization + cash funding*	Status
10	on-going	Compilation of rosters on regional experts, research organizations, equipment manufacturers etc	HRC national RN-SHP Focal Points amd other relevant organizations	Prelim questionnaires sent out to Focal Points 1984, but with slow response; will following-up in 1985
11	on-going	Compilation of video films on various aspects of SHP	HRC + national RN-SHP Focal Points	9 video films completed; survey of resources available in the region planned
12	on-going	TOKTEN Consultant-Dr.E.Chang as assistant to Director of HRC	UNDP	First contract began Sept 83 and has been completed; Second contract underway.

* Note Where no cash contribution is given against a given organization this indicates a contribution in kind. HRC's contributions and salaries (not included above) are sponsored by the Chinese Government and Secretariat expenses (from UNDP).

Table 2 Matrix of participants from Asia-Pacific region in RN-SHP activities completed 1982-Nov.1984

ESCAP	Activity, numbered as in Table 1					
Country	1	2	3	4	5	6
Afghanistan			1			
Bangladesh	1					
China	3	2	1	3	✓	✓
Fiji	1	1	1		✓	✓
India	1		1			
Indonesia		2			✓	✓
Korea			1			
Malaysia	1	3	2		✓	
Mongolia			1			
Nepal	1	2	1	several	✓	✓
Pakistan	1	2			✓	✓
Papua New Guinea						✓
Philippines	1	3	2	several	✓	✓
Sri Lanka	1	1			✓	
Thailand	1	2	2	several	✓	✓
	12	18	13			

	1982	1983	1984 (to Oct.)
No. of working visits from UN officials:	16	6	4
Asia-Pacific visitors:	3	7	5
Others:	-	12	4
	19	25	23

Total: 67

Table 3 RN-SHP FOCAL POINTS revised Oct., 1984

China : Mr.Zhu Xiaozhang

Director
Hangzhou Regional Centre (Asia-Pacific) for SHP
PO Box 544
Hangzhou

Fiji : Mr.B.Dutt

The Permanent Secretary
Ministry of Energy and Mineral Resources
PO Box 2256
Government Buildings
Suva

Indonesia : Dr.A.Arismunandar

Director General of Energy
Ministry of Mines and Energy
Jakarta

Malaysia : Mr.Jaluddin bin Zainuddin

General Manager
Dept. of Mini Hydro
National Electricity Board, 129 Jalan Bangsar
Kuala Lumpur

Nepal : Mr.A.K.Shrestha

Project Director
Small Hydro Development Board
Kathmandu

Pakistan : Mr.M.Sohail Qureshi

Director General Energy Resources
Secretary National Energy Policy Committee
Ministry of Petroleum and Natural Resources
Islamabad

Papua New Guinea : Mr.Chris Cheatham

Power Systems Planner,
Energy Planning Unit
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Philippines : Ms.Z.A.Santos

Executive Director
Mini Hydro Development Office
National Electrification Administration
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Sri Lanka : Secretary, Ministry of Power and Energy

PO Box 576
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Thailand : Mr.Prapath Premmani

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